**BRIGADIER GENERAL PAUL S. IZZO**
**PROGRAM EXECUTIVE OFFICER FOR AMMUNITION,**
**PICATINNY ARSENAL, NEW JERSEY**

**Born in October 1953, Brigadier General Izzo is a native of Sara Springs, New York. He received his commission in 1975 as a Se Lieutenant in Armor following graduation from St. Bonaventure where he earned a Bachelor Degree in Business Administration he earned a Master Degree in Management Science from Centr University. His military education includes Airborne School, th Officer Basic Course, Armor Advanced Course, Command Gener College, the Defense Systems Management College, and the U. War College.**

**Brigadier General Izzo was named Program Executive Officer of established Program Executive Office Ammunition in January 2002. He previously served as the Deputy for Systems Acquisition, U.S. Army Communications-Electronics Command (CECOM). Other recent assignments include, Project Manager for the Bradley Fighting Vehicle System (BFVS), and Executive Officer to the Military Deputy to the Assistant Secretary of the Army (Research, Development, and Acquisition). Other key assignments were PM for Constructive Simulations at STRICOM, which included developing the concept for WARSIM 2000, Operations Officer for 3-37 Armor, 1st Infantry Division during the Gulf War, Aide de Camp, Bradley and M1Al Tank Live Fire Test Officer at Aberdeen Proving Ground, MD, Operations Officer and Company Commander 2-37 Armor, 1st Armored Division, Germany, Battalion Maintenance Officer, Tank Company Executive Officer and Tank Platoon Leader, 1st Infantry Division, Fort Riley, Kansas.**

**Brigadier General Izzo's awards include: the Legion of Merit (2-OLC), the Bronze Star with "V" device and OLC, the Meritorious Service Medal (5-OLC), Army Commendation Medal with OLC, Army Achievement Medal with OLC, Army Staff Badge, Parachute Badge, and various other decorations for Gulf War Service.**

**Brigadier General Izzo and his wife, Kathleen, have four children, Amy, Paul Jr.**

# Ammunition for Full Spectrum Warfare
and
# Managing DoD's Ammunition Industrial Base

## 24 June 2003

**BG Paul S. Izzo**
**Program Executive Officer,**
**Ammunition**

# Where PEO Ammo Programs Came From

**Established: January 1, 2002**

**PEO GCS**
- PM ARMS
- PM TMAS
- PM Crusader (MACS)

**# Programs 23**

**DSA-TACOM**
- PM Mines
- PM Mortars
- PM Small Arms

**# Programs 74**

**AMC/DCS Ammo**
- Training Ammo
- Industrial Base
- Demil
- ARDEC (Fuze Programs)

**# Programs 94**

**PEO Ammo**
- **PM MAS**
- **PM CAS**
- **PM CCS**
- **PM Joint Services**

**Total People Managed 725 at Picatinny**

ARDEC Life-Cycle Engineering Suppo
- Competencies
- Modeling and Simulation
- Technology Maturation
- Sustainment Support

**Total RDA Programs 191 programs**

**Total Dollars $1,253.6 M**

# PEO Ammo

## MISSION

Develop and Procure Conventional and Leap-Ahead Munitions Combat Power to Warfighters

## GOALS

- Get PGM's & Smart Weapons to Warfighters
- Improve and Sustain the Conventional Stockpile
- Satisfy the Customer, Achieve Excellence

# PEO Ammo Organization

**PEO Ammunition**

BG Paul Izzo PEO
Mr. Kevin Fahey DPEO

**Industrial Base**

**Close Combat Systems**

Mr. Jim Sutton PM

**Networked Munitions/ Munitions / Countermine**

**Demolitions / Non-Lethal**

**Combat Ammo Systems - Indirect Fire**

COL Nate Sledge PM

**Mortars**

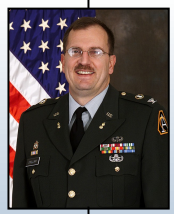
**Excalibur**

**Maneuver Ammo System - Direct Fire**

Mr. Bill Sanville PM

**Large Caliber**

**Medium & Small Caliber**



**Joint Services**

COL Jeff Gwilliam PM

**DEMIL**

# ASAALT Operations Cell

- **PEO Ammunition was located at the ASA(ALT) OPS Cell in support of Operation Enduring Freedom and Operation Iraqi Freedom**
- **Mission:**
  - ✓ **Account for all ASA(ALT) personnel in theater**
  - ✓ **Provide readiness link to PEOs for quick reaction to war-fighter**
  - ✓ **Support Battle Damage Assessment (BDA)**

MAJ Jason Robbins and MAJ Joe Hitt, PEO Ammo L

# Close Combat Systems Mission

## Equip Soldiers with Close Combat Systems fo

| Assured Mobility | Force Protection | Close Battle |
|---|---|---|
| Intelligent Munitions System Defeat | APLA | Hard Target |
| Anti-Personnel Landmine Alternative (APLA) | Countermine | Demolitions |
| Countermine | Non-Lethal | Hand Grenades |
| Demolitions | Pyro/Flares | Non-Lethal |
| | EOD Equipment | Pyro/Flares |

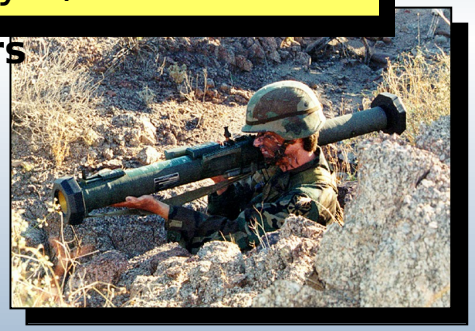
SBCT Volcano

15 Prime Contractors
- 30 Contracts

GOCOs
JMC

R&D Establishments
- TARDEC
- ARDEC
- ARL
- CERDEC

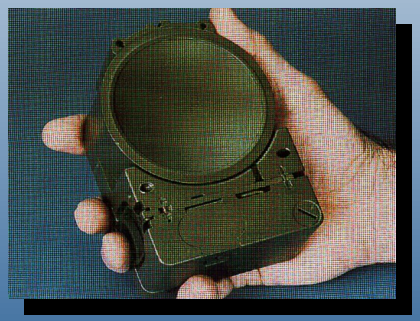
**Combat Developers**
- USAES
- USAMPS
- USAFAS
- USASOC
- USAIS
- USMC



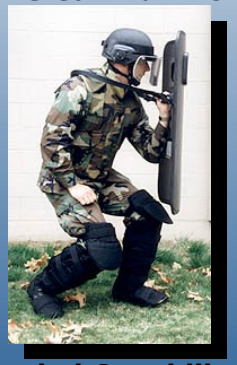
Bunker Defeat Munition

AN/PSS-14
Mine Detecting Set

M67 Hand Grenade



Selectable Lightweight Attack Munition



Non-Lethal Capability Se

# AN/PSS-14 in Afghanistan

Four (4) US Army Soldiers sweep an area for landmines near Bagram Military Base - May 03

A U.S. soldier sweeps for landmines at Bagram military base in Afghanistan March 6, 2003.
Despite a massive mine clearance effort, 80 to120 people are maimed or killed by landmines
every day in war-torn Afghanistan, the most heavily mined country in the

# Urgent Fielding / Support Readiness

- **Examples include:**
  - ✓ **Non-lethal munitions and riot control equipment for EPW Camp and SASO support**

EPW Camp near Um Qasr, Iraq

- **Three Non-lethal Capability Sets provided**
  - ✓ **Non–lethal munitions and riot gear**

Acquisition Corps Patc

Theater Distribution Center (TDC). PEO Ammo personnel assisted in tracking parts.

Unserviceable MOPMS. PEO Ammo developed a repair procedure to quickly fix the cracks.

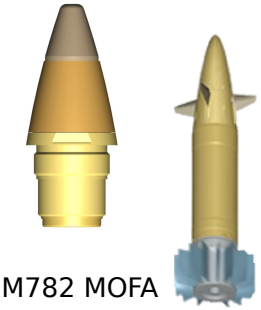
HSTAMIDS Battery Cover. PEO Ammo FEDEX'd the parts to the PEO Ammo LNO on the ground.

# PM Combat Ammunition Systems

LCCM

795 E1

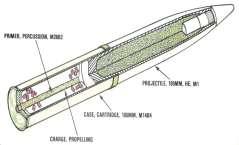
Excalibur Discriminating



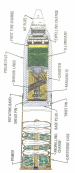
M782 MOFA

Excalibur Unitary

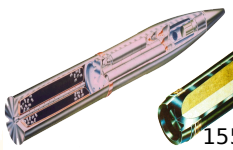
M1155 PIAFS



105mm M1 HE



105mm M314A3 Illum



105mm M915 DPICM

155mm M795 HE Projectile

155mm M107 HE

155mm M804A1 Practice

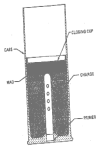
M782 MOFA

Time

M767

MOUT

MK399 MOD1

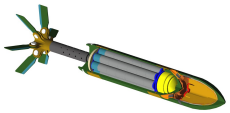


75mm M337A2 Blank

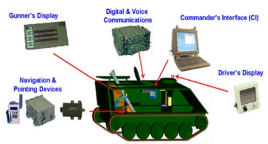
155mm M231/M232 Prop

**Concept** | **Development** | **Production**

# Mortars



120mm XM984 DPICM

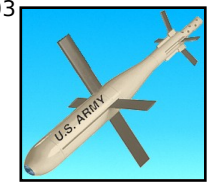


(MFCS) Heavy

120mm Training Insert, M303

MBC

Mortar Fire Control System - Light (MFCS-L)




120mm XM395 (PGMM)

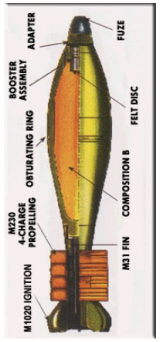
*60mm M769 FRPC*

81mm M853A1 Illum

120mm M983 IR

60mm M720A1 HE

81mm M821A1/M889A1 HE




120mm M934 HE

**Concept** | **Development** | **Production** | **Sustainment**

# Mortar Fire Control System (MFCS

1st Cav. Div.
Fort Hood, Texas

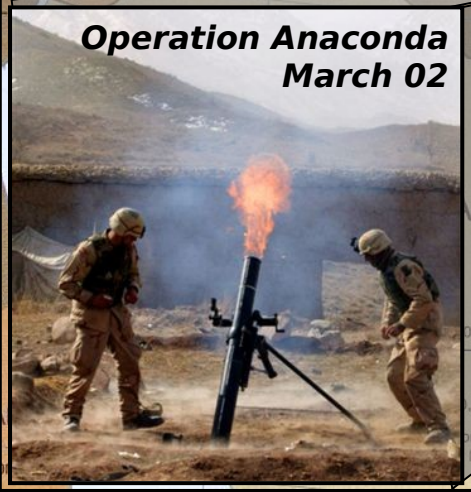
Operation
Iraqi Freedom

- Completed Initial Operational Testing and Evaluation (IOT&E) November 2002
- Type Classified (TC) — April 2003
- MFCS Conditional Materiel Release (CMR) — May 2003
- Accelerated fielding to 1st CD in support of Operation Iraqi Freedom — May 2003

in support of Operation Iraqi Freedom

# Mortar Systems In Action

**Mortars in Action during Operation Iraqi Freedom March 03**

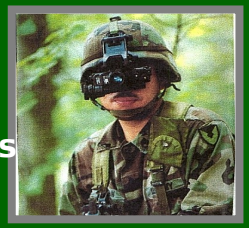


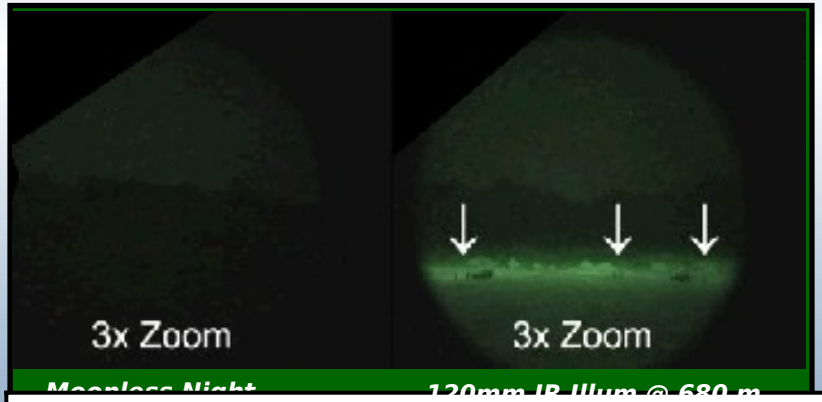
**Operation Anaconda March 02**

# Mortar Illuminating Cartridges

## User Payoff

- Illuminate throughout range of HE
- Exceeds ORD burn time
- Sharper Images
- Leverages NVD Capabilities
- Validates “Own the night”






120mm XM930 Visible / M983 Infrared

81mm M816 Infrared (IR)

60mm M767 Infrared (IR)

**60mm & 81mm Mortar Systems now equipped with IR Illums**

**The World’s First IR Illuminating Mortar Cartridge**

**“IR ILLUMINATION WAS VERY USEFUL. 60MM PROVIDED EXCELLENT IR ILLUMINATION WHILE USED IN THE HAND HELD MODE.”**

***Quote from SFC Jeff McLaughlin HHC 75th Ranger Regiment and SFC Joe C. Davis, HHC 3rd BN 75 Ranger***

# Operation Iraqi Freedom

"U.S. Army mortar platoon Sgt. James Verbowski, from Cocoa Beach Fla., cheers after a mortar fired from his squad hit the Baath Party headquarters in Baghdad, Iraq..."
Scranton Tribune 4/8/03
(AP PHOTO)

# PM Maneuver Ammunition Systems
# Large Caliber Ammunition

# PM Maneuver Ammunition Systems Large Caliber

- Rounds Used in Abrams Tank Included M829A1/A2 APFSDS-T; M830 HEAT; M830A1 HEAT-MP-T
  - ✓ Many more Chemical Energy Rounds Utilized than Kinetic Energy
- USMC used M830A1
  - ✓ Outstanding Performance
    - Useful Against Structures
- US Army used M830's
  - ✓ Rounds Met Performance
- 2,000 M908 HE-OR-T Rounds shipped to theater
  - ✓ Concurrent Worldwide Material Release and Shipping
  - ✓ On time, but never used
- Assessing After Action Reports
  - ✓ M829E1 Complaints
    - Remained in Theatre after Desert Storm
      - Was Issued, but should not have been there
    - Glue Joint Separations after Years of High Temperature Exposure
      - Glue Joint Improved in Newest Rounds
    - Arrangements made to get back to CONUS

# Small & Medium Caliber Ammunition

5.56mm

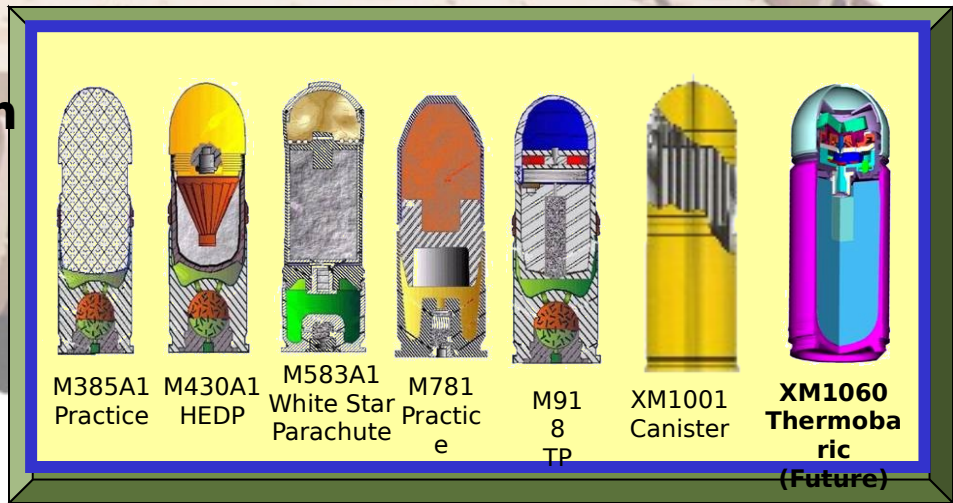
7.62mm

.50 Cal

25m

40mm

30mm



# PM Maneuver Ammunition Systems
# Small & Medium Caliber

- **Bradleys:**
  - ✓ **First use of 25mm M919 in Combat**
    - **Outstanding Performance**
- **Apache/Blackhawks:**
  - ✓ **High Demand for HEDP M789**
  - ✓ **FMS Buy Diverted / Urgency Buy Initiated**
- **MK19/M203:**
  - ✓ **Thermobaric Round Fielded**
- **M16/M4: M855**
  - ✓ **70% of Assets Expended**
- **Assessing After Action Reports**
  - ✓ **Improved M855 Stopping Effects Desired for Close in Combat**
    - **Currently Testing Lethality of over 20 Potential Replacements**

# PM Joint Services

## Single Manager for Conventional Ammunition (SMCA)

- **SMCA Mission:** Manage DoD conventional ammunition

**SMCA Total:**
**$1.3B for FY04,**
**166 items**
**All Services**

- **Objectives:**
  **Achieve excellence in acquiring top quality conventional ammunition for U.S. Forces**

# Industrial Base Management

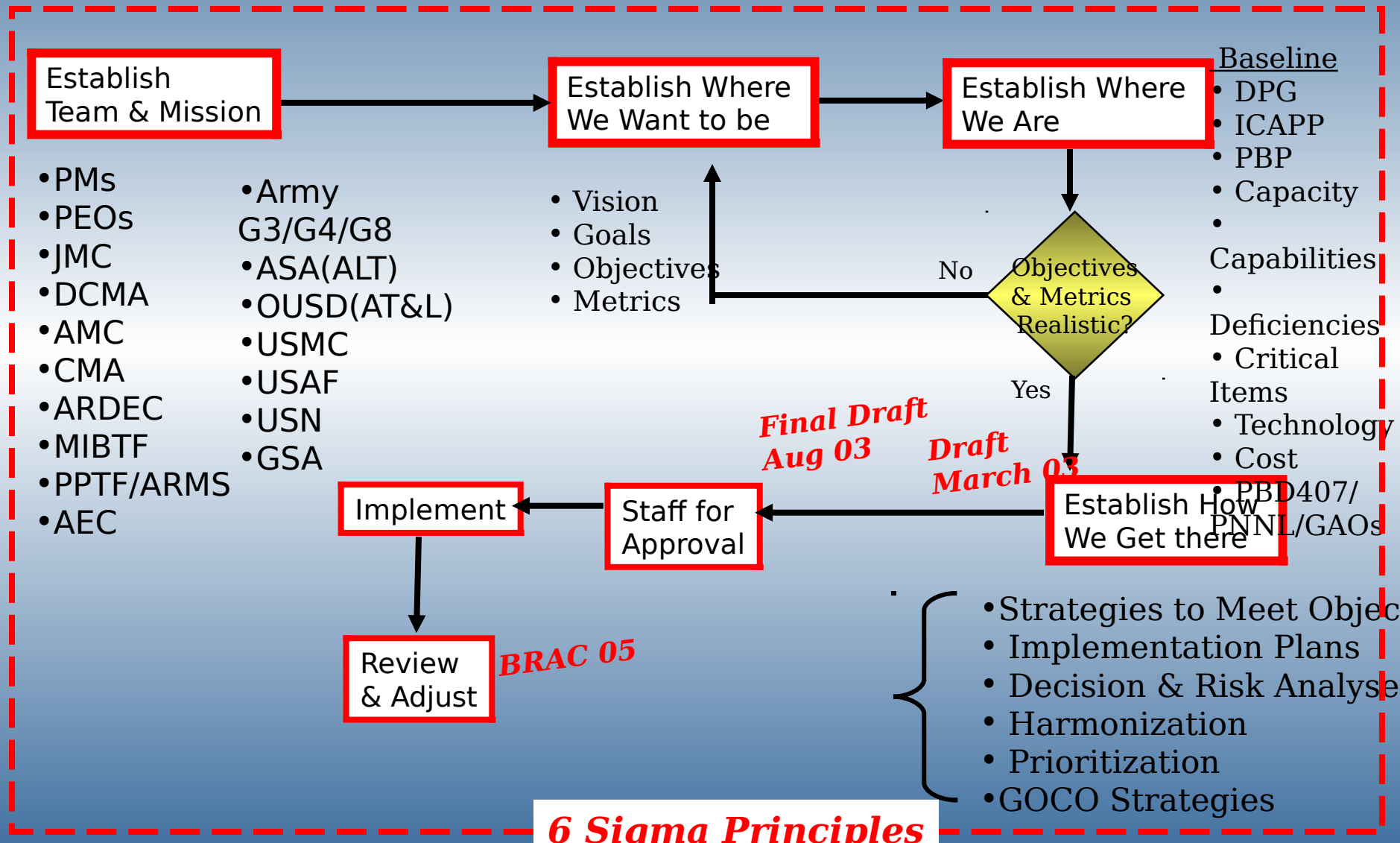
- **Mission:**
  - ✓ **Provide Integrated Management of the Ammunition Industrial Base**
  - ✓ **Optimize Planning, Coordination & Decision Making that Affects the Preparedness of the National Technology & Industrial Base**
- **General Responsibilities:**
  - ✓ **Perform Industrial Base Management**
    - **Develop an Overarching Industrial Base Strategic Plan**
    - **GOCO Production Management and Modernization Strategies**
    - **Develop a Production Base Plan**
  - ✓ **Implement Section 806, Public Law 105-261, Procurement of Conventional Ammunition**

**Integrated Product Team**

| | | | |
|---|---|---|---|
| •PEOs | •JMC | •Army | •USMC |
| •PMs | •CMA | G3/G4/G8 | •USAF |
| •DCMA | •ARDEC | •ASA(ALT) | •USN |
| •AMC | •Industry | •OUSD(AT&L) | •ACSIM/AEC |
| | | •GSA | |

IPT Jointly Planning & Executing

# Strategic Planning Approach



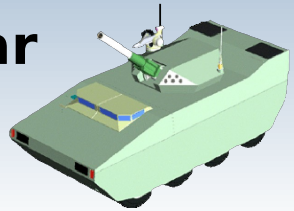
# PEO Ammo's Efforts Are Aligned

## With LSI's Family of Combat Systems

**120mm BLOS / LOS**

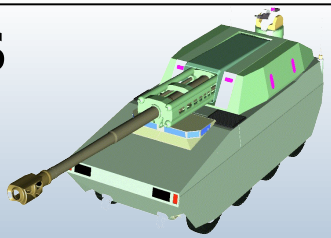
- MRM
- Advanced KE
- Advanced Multi-Purpose Anti-Tank (MPAT)
- Lt Wt 120mm Cannon

**120mm Mortar**



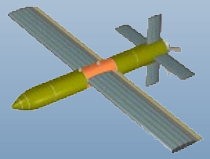
- Precision Guided Mortar Munition (PGMM)
- Mortar Fire Control
- Advanced Mortar System (AMOS)

**155mm NLOS**



- XM982 Excalibur
- Low Cost Course Correction
- Next Generation Scatterable Mines (NGSM)

**SUAV**



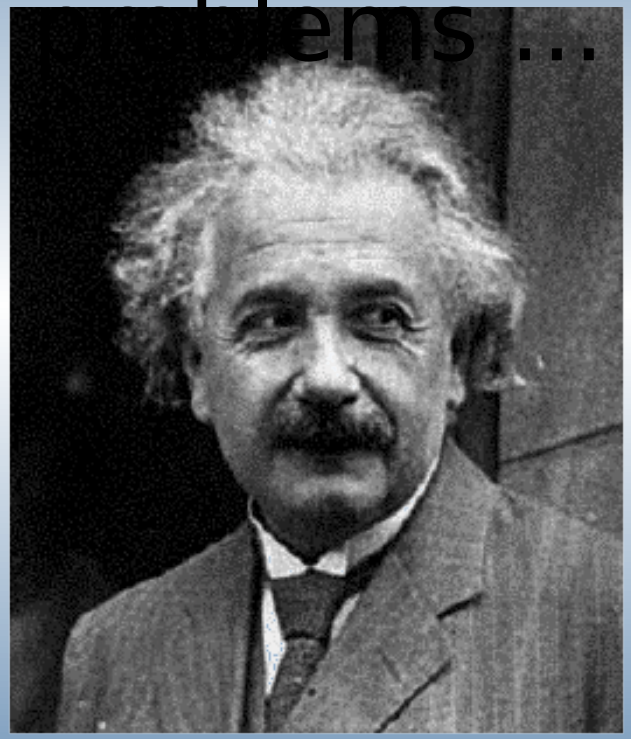
- Intelligent Munitions System (IMS)
- Quicklook
- Air Standoff Mine Detection System (ASTAMIDS )

**Infantry Carrier Vehicle**

- Bursting Munitions
- Medium Caliber Program
- Ground Standoff Mine Detection System

# Conclusion

We cannot solve our problems ...



... with the same thinking we used

PEO
Ammunition
Joint Lethality